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WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for

UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE, and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation, Utah Fish and Game Dept., Utah Agricultural Experiment Station, U.S. National Park Service, U.S. Geological Survey; and other Federal, State, and private organizations.

MAR. 1, 1963

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 4170, Portland 8, Oregon.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	LOCATION	COOPERATING WITH
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEBMAY)	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MARMAY)	PALMER. ALASKA	ALASKA S.C.D.
AR I ZONA	SEMI-MONTHLY (JAN.15 - APR.1)		SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORAGO ANO NEW MEXICO	MONTHLY (FEBMAY)	FORT COLLINS. COLORAGO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
Гоано	(JANJUNE)	BOISE. IOAHO	. IOAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NE V A O A	_ MONTHLY (JANMAY)	RENO, NEVAOA	NEVAGA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
ORE GON	MONTHLY (JANJUNE)	PORTLANO, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	_ MONTHLY (JANJUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	_ MONTHLY (FEBJUNE)_	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	_ MONTHLY (FEBJUNE)	. CASPER, WYOMING	WYOMING STATE ENGINEER
	PUBLISHED BY	OTHER AGENCIES	
REPORTS	ISSUED		AGENCY
BRITISH COLUMBIA	MONTHLY (FEBJUNE)	WATER RIGHTS BR. NATURAL RESOURCES B.C., CANAOA	, DEPT. OF LANOS, FORESTS AND PARLIAMENT BLOG., VICTORIA,
CALIFORNIA	MONTHLY (FEBMAY)	CALIF. DEPT. OF W SACRAMENTO, CALIF	ATER RESOURCES, P.O. BOX 388,

WATER SUPPLY OUTLOOK

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

for

UTAH

MARCH 1, 1963

Report prepared by

GREGORY L. PEARSON, Snow Survey Supervisor and

GARRY DINSDALE, Asst. Snow Survey Supervisor

SOIL CONSERVATION SERVICE SNOW SURVEY SECTION 222 SOUTH WEST TEMPLE SALT LAKE CITY 1, UTAH

Issued by

WAYNE D. CRIDDLE

STATE ENGINEER

STATE OF UTAH

SALT LAKE CITY, UTAH

J.A. LIBBY

STATE CONSERVATIONIST

SOIL CONSERVATION SERVICE

SALT LAKE CITY, UTAH

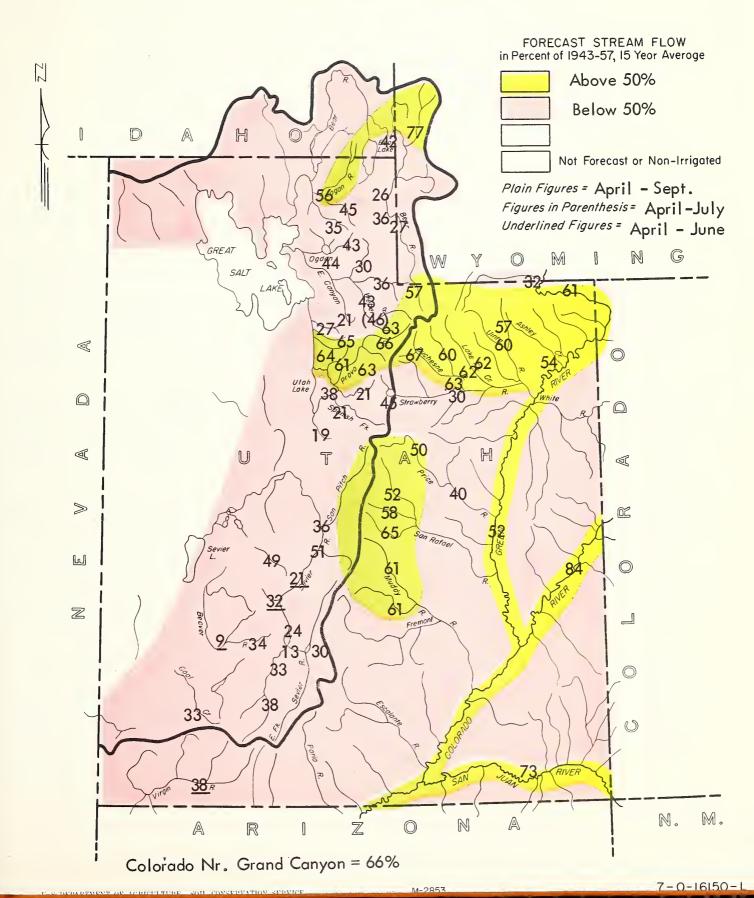
DR. D.W. THORNE
DIRECTOR
UTAH AGRICULTURAL
EXPERIMENT STATION
LOGAN, UTAH



PROSPECTIVE WATER SUPPLIES

Based on Snow Surveys Made on UTAH and BEAR RIVER WATERSHEDS







WATER SUPPLY OUTLOOK as of MARCH 1, 1963

Snow cover is now so light on many streams - particularly the low and intermediate elevation watersheds - that they can be expected to show little or no rise when the snows melt this spring.

The streams with the best prospects - where forecasts range from 60% to 66% - are the Cottonwood Creeks near Salt Lake, the American Fork, upper Weber and Provorivers and the streams on the northern side of the Uintah Basin from the Duchesne river to the Uinta river. Central Utah streams which are also included in this forecast range are Ferron Creek, Muddy river and the streams from Mayfield to Ephraim.

The outlook is extremely poor in southern Utah for the water users of the Sevier, Virgin and Beaver rivers. Streamflow forecasts here range from 9% of average inflow to Rockyford reservoir near Minersville to 38% on the Virgin river and the Sevier river at Hatch. Streamflow is expected to be about two thirds to three fourths of that measured in 1960 and 1961, both of which were dry years.

Even if we have average snowfall during March, the April 1st snowpack on several of the most important snow courses in this southern area will be the lowest it has ever been since records began in 1927. One example of this is the Webster Flat course a few miles south of Cedar Breaks National Monument. It now has 9 inches of snow with 2.2 inches water. If it picks up the average amount of water during March, there will only be 4.7 inches water for the April 1st survey. The lowest previous April 1st reading occurred in 1953 when 6.9 inches water were recorded. The average April 1st reading is 15.6 inches.

In Utah County, the April-September inflow to Utah Lake is expected to be 38% of average. This will be about one fifth more than in 1961. Storage in Utah Lake on February 28 was 277,500 acre feet. This is 18,600 acre feet less than two years ago, so that the total water supply outlook for users below the Lake is about comparable to what it was then. Southern tributaries to Utah Lake the Spanish Fork river, Hobble Creek near Springville and Payson Creek are all forecast at about 20%.



This is essentially the same as their 1961 flow. Inflow from the Provo and American Fork rivers are forecast at 63% and 61%, respectively. This will be about twice the flow of 1961.

Streams of the Uintah Basin and those near Manila are forecast between 54% and 63%, exceptions being the Strawberry river at Duchesne and Henry's Fork near Linwood, where about 30% is expected. All streams from the Uinta river and eastward have prospects of 10% to 20% less water next summer than was available in 1960 and 1961. From Yellowstone Creek westward to the Duchesne river streamflow is expected to be about comparable to that of 1960 and 1961.

The outlook varies from 40% to near 60% for the Price river, Huntington and Cottonwood Creeks, the northern tributaries of the San Pitch river, the Fremont river and the streams near Moab, Monticello and Blanding.

Following the storm the last of January, the warm weather during the early part of February continued to remove the low and intermediate elevation snowpack. This, coupled with the dry weather of the past month caused forecasts for some of the lower watersheds to drop as much as 30% to 40% below that expected on February 1.

In northern Utah the expected flow from the lower elevation watersheds varies from about 20% to 35%. Included among these are Parley's Creek near Salt Lake, East Canyon Creek near Morgan, Chalk Creek near Coalville, Lost Creek near Croydon, streams near Woodruff and Randolph and the Little Bear river in Cache Valley.

Inflow to Pineview reservoir on the Ogden river is expected to be 44% of average, while for the higher streams in Cache Valley and for the upper Bear south of Evanston, Wyoming the outlook varies from 45% to 60%.

On the Colorado river and its main tributaries in Utah, forecasts range from a low of 52% for the Green river at Green River, Utah to a high of 84% on the Colorado river near Cisco.



UTAH STREAMFLOW FORECASTS 4 (1,000 Ac. Ft.)

	FORECAST POINT	FORECAS THIS YEA			AVERAGE b	THIS YEAR AS PERCENT OF AVERAGE
-	GRE BEAR RIVER SYSTEM	AT BAS	IN			
	Bear nr Ut-Wyo. State Line Bear nr Woodruff Woodruff Crk nr Woodruff, Ut. Big Crk nr Randolph, Ut. Bear ñr Randolph Smith's Fork nr Border, Wyo.	70 36 7 2.5 10 92 25 16 80 30	Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep	t 134 t t t 104 t 142 t t 55 t 140	123 133 19.4* 9.7* 115 119 299 46 143 67	57 27 36 26 9 77 42 35 56 45
V	VEBER-OGDEN RIVERS					
W C L	Veber nr Oakley Vanship Reservoir Inflow(3) Veber nr Coalville (4) Chalk Crk at Coalville Cost Crk nr Croydon, Ut. East Canyon Crk nr Morgan (5) Co. Fork Ogden nr Huntsville Vineview Reservoir Inflow (6)	67 85 60 62 15 6 6 30	Apr-Jun Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Jul	t 148 y t 155 t 33 t 14.8 t 22.2 t 67	107 134 130 * 143 42 19.9 28.7 70	63 63 46 43 36 30 21 43
F	ROVO RIVER & UTAH LAKE					
S F F F	American Fork nr American Fork	25 9 1.5 5 77 00 22 20	Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep Apr-Sep	t 47 t 8.6 t - t t - t	56 43 8.0* 23.7* 116 * 159 36 317	45 21 19 21 66 63 61 38
2	JORDAN RIVER & SALT LAKE					
E	ittle Cottonwood Crk nr SLC Big Cottonwood nr SLC Parley's Crk nr SLC	25 26 4	Apr-Sep Apr-Sep Apr-Sep	t 44	39 40 14.7	64 65 27

⁽¹⁾ Includes U.P.& L. Co. tailrace and Logan, Hyde Park & Smithfield Canal. (2) Above Utah Power & Light Company's dam. (3) Observed flow Weber River near Wanship, Utah, plus change in storage in Wanship Reservoir, plus diversion by Weber-Provo Canal. (4) Includes diversion by Weber-Provo Canal and change in storage in Wanship Reservoir. (5) Observed flow plus change in storage in East Canyon Reservoir. (6) Inflow record as computed by U.S. Bureau of Reclamation. (7) Change in storage plus diversion thru Strawberry tunnel. (8) Observed flow minus diversions thru Duchesne tunnel and Weber-Provo Canal. (9) Observed flow plus change in Storage in Deer Creek reservoir, minus diversions thru Duchesne tunnel & Weber-Provo Canal, plus diversion thru Salt Lake Aqueduct.



UTAH STREAMFLOW FORECASTS a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE b	THIS YEAR AS PERCENT OF AVERAGE
SEVIER RIVER					
Sevier at Hatch		Apr-June	48	35	30
Sevier nr Circleville Sevier nr Kingston	18.5 14 2.5 4	Apr-Sept Apr-June	62 54 28.9	49 43 * 24.6	38 33 10
East Fork Sevier nr Kingston(10)	3 6.5	Apr-Sept Apr-June		17.2	13 17
Sevier below Piute Dam(11) Clear Crk nr Sevier(abv.Div.) Inflow	12	Apr-Sept Apr-Sept Apr-June	14.5	21.6 51 15.9*	30 24 32
Kingston to Vermillion Dam Vermillion Dam to Gunnison Calina Crk at Calina (12) Sevier or Gunnison a Chalk Creek or Fillmore	10 32 0.5 23	Apr-June Mar-June Apr-June Apr-Sept Apr-Sept	one	47 63 9.4* 64 20.3*	21 51 5 36 49
BEAVER RIVER					
Beaver nr Beaver	7.5	Apr-June			34
Rockyford Reservoir Inflow(13)	10	Apr-Sept Apr-June		29.4 9.2	34 9
COAL CREEK					
Coal Crk nr Cedar City	5.5	Apr-Sept	400 GD	16.6	33
COLORAD GREEN RIVER TRIBUTARIES IN UTAH FLAMING GORGE TO DUCHESNE RIVER	O RIVER I	BASIN			
Henry's Fork at Linwood Achlev Count or Vernal	13 32	Apr-Sept Apr-Sept	82.	40 59	32 54,
DUCHESNE RIVER					
Duchesne at Provo River (Trail nr Hanna) Duchesne nr Tabiona(14) Rock Crk nr Mtn. Home Strawberry at Duchesne Lakefork below Moon Lake(15) Uinta nr Neola Whiterocks nr Whiterocks Yellowstone nr Albanah	28 78 65 24 48 61 38	Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-Sept	158 131 94 100	42* 124 109 79 78 101 67 79*	67 63 60 30 62 60 57 62

(10) Observed flow plus change in storage in Otter Creek Reservoir. (11) Observed flow plus change in storage in Otter Crk & Piute Reservoirs. (12) Gage is below diversions near Salina. (13) Observed flow at Rockyford Dam, corrected for change in storage in Rockyford Reservoir. (14) Observed flow plus diversion through Duchesne Tunnel. (15) Observed flow plus change in storage in Moon Lake Reservoir.



UTAH STREAMFLOW FORECASTS a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	LAST YEAR	AVERAGE b	THIS YEAR AS PERCENT OF AVERAGE
		-			
PRICE RIVER					
Gooseberry Crk nr Scofield Scofield Reservoir Inflow(16) Price nr Heiner(16)	7 20 28	Apr-Sept Apr-Sept Apr-Sept	16.8 96	12.6 40 70	56 50 40
SAN RAFAEL RIVER					
Huntington Crk nr Huntington Cottonwood Crk nr Orangeville Ferron Crk nr Ferron	31 34 28	Apr-Sept Apr-Sept Apr-Sept	72 60	59 59 43*	52 58 65
MUDDY RIVER					
Muddy Creek nr Emery Ivie Creek, abv.Div. nr Emery	14	Apr-Sept Apr-Sept	es co	23.1* 1.8*	61
VIRGIN RIVER					
Virgin at Virgin	16.5	Apr-June	57	44	38
UPPER COLORADO BASIN					
Flaming Gorge Inflow(17) Green at Green River,Utah(17) San Juan nr Bluff,Utah(18) Colorado nr Grand Canyon(17-18) 5	400 895 857 900 100	Apr-Sept Apr-Sept Apr-Sept Apr-Sept Apr-July Apr-Sept	10888	4059 1471 3540 1226 8056 9155	84 61 52 73 63 66

GENERAL FOOTNOTES

⁽¹⁶⁾ Observed flow plus change in storage in Scofield Reservoir. (17) Observed flow plus change in storage in Flaming Gorge and Big Sandy Reservoirs. (18) Observed flow plus change in storage in Navajo Reservoir.

⁽a) Runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. The discharge data is taken from preliminary records of the U.S. Geological Survey. (b) 1943-57, 15 year period. *Partly estimated.



				· · · · · · · · · · · · · · · · · · ·	
BASIN or STREAM	RESERVOIR	USABLE	MEASURED (FIRST OF MONTH)		
		CAPACITY	THIS YEAR	LAST YEAR	AVERAGE

GREAT BASIN

Bear River	Bear Lake Woodruff Narrows	1421.0 26.5	761.4 18.5	524.3 12.8	815.6			
Little Bear	Hyrum Porcupine	15.3 11.3	12.6 3.5	10.7	10.7			
<u>Ogden</u>	Pineview	110.0	63.5	34.5	7.2			
Weber	Rockport Echo East Canyon	60.9 73.9 28.7	33.6 37.5 19.4	18.4 24.8 6.9	28.5 16.0			
Provo	Deer Creek	149.7	120.9	61.5	82.3			
Spanish Fork	Strawberry	270.0	52.6	20.1	134.3			
Utah Lake	Utah Lake (b)	1149.0	277.5	257.8	614.2			
Sevier River	Otter Creek Piute Sevier Bridge	52.5 74.0 236.1	22.4 28.9 57.8		31.9 46.4 150.4			
Beaver River	Rocky Fork	23.3	8.6	8.2	15.3			
COLORADO RIVER DRAINAGE								
Lake Fork	Moon Lake	35.8	15.9	24.2	13.9			
Price River	Scofield	65.8	18.1	2.5	16.1			

All data contained in this table supplied by the U.S. Geological Survey * - Total capacity reported

Flaming Gorge

Lake Powell

Navajo

Green

San Juan

Colorado

3789.0%

1709.0%

28040.0%

67.7

101.6

135.0



RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES	THIS YEARS SNOW WATER	R EXPRESSED AS PERCENT C
RIVER BASIN OF TRIBUTARY WATERSHED	AVERAGE	LAST YEAR	AVERAGE *
G	REAT BASIN		
Smith's Fork - Bear River(Wyo)	3	68	80
Strawberry-Mink Creeks(Ida)	3	35	22
Cub River (Ida)	1	38	38
Logan River	3	51	5 4
Blacksmith Fork-Little Bear	5	45	49
Malad River (Idaho)	2	28	26
Ogden River	4	41	44
Weber River above Echo Dam	8	49	54
Chaik Creek - Coalville	3	50	48
East Canyon Creek	3 3 2	50	50
Farmington Creek		35	42
Salt Lake Area	4	49	50
Tooele Aren	1	19	18
American Fork River	3	39	40
Provo River above Vivian Park	6	50	55
Strawberry Reservoir Valley	3	44	48
Hobble Creek	2	28	32
Mt. Nebo Area	2	28	33
Sevier River above Panguitch	4	14	17
East Fork Sevier River	4	26	28
Clear Creek above Sevier	1	57	46
Salina Creek	2	65	68
San Pitch River	6	50	68
Chicken Creek - Levan	1	35	51
Chalk Creek - Fillmore	3	33	44
Beaver River	3 2	42	41
Parowan Creek		39	38
Coal Creek - Cedar City	3	17	22
Enterprise - New Harmony	2	8	9
COLO	RADO RIVER BAS	IN	
Duchesne River above Tabiona	3	52	58
Strawberry River	1,	35	44
Lakefork River	2	32	46
Whiterocks-Uintah Rivers	3 4	29	40
Ashley Creek		25	35 50
Price River	6 - 4	36 53	50 68
San Rafael Tributaries	4	52 24	
Fremont River	2	30	33 35
Escalante River	4	8	10
Virgin River LaSal Mtns. near Moab	2	67	62
Blue Mtns. nr Monticello	2	46	43
blue units, in nontricello	4	-10	



GREAT BASIN DRAINAGE

	GR	ENI BASTI	N DRATNA	a E			
(Above Harer, Idaho)							
Big Park CCC Camp x Kelly Ranger Station Monte Cristo R. S. Piney LaBarge x Poison Meadows x Salt River Summit x Trial Lake x	10G11 10G7 10G12 11H12 10G10 10G6 10G8 10J8	8700 7500 8200 8960 8820 8500 7900 9800	3/3 2/28 3/3 2/28 3/2 2/28 2/28 2/28	50 28 40 37 51 69 41	14.1 7.8 11.9 14.8 15.6 21.0A 10.4	23.5 11.7 26.6 23.1 34.0A 14.9 26.6	17.2* 10.4 22.7* 17.5* 25.2* 13.6* 23.4*
LOWER BEAR RIVER (Below Harer, Idaho)							
Beaver Crk-Skunk Crk. Christensen Ranch Cub River R. S. Dry Bread Pond x Dry Creek Flat Emigration Canyon Emigrant Summit Garden City Summit Klondike Narrows Little Bear(lower) Little Bear(upper) Monte Cristo R. S. Oxford Mountain Steep Hollow #1 Steep Hollow #2 Strawberry Creek Strawberry Mink Divide Tony Grove R. S. Willow Flat	11H14 11G11 11G12 11H13 12G4 11G7 11H6 11H7 11H1 11H26 11H25 11H12 12G3 11H27 11H28 11G9 11G10 11H3 11G4	7150 5600 5400 8230 6350 6500 7700 7600 7400 6100 6850 8500 7700 5800 6800 6250 6100	2/28 2/26 2/28 2/26 2/28 2/28 2/28 2/26 2/27 2/25 2/25 2/25 2/27 2/28 2/27 2/28 2/28 2/26 2/27	13 0 0 36 16 48 35 35 0 5 37 14 66 50 520 13	3.9 0.0 0.0 10.8 Trace 6.7 14.6 11.0 10.5 0.0 1.6 14.8 4.7 22.2 17.9 1.2 6.8 4.1 5.5	11.9 9.0 8.2 16.6 6.6 10.7 22.8 18.5 18.6 10.2 12.5 26.6 8.2 35.2 26.8 12.0 21.2 14.6	11.6* 9.4* 8.9* 16.7* 7.2* 17.4* 16.7* 8.0* 10.2* 22.7* 9.0* 11.4* 19.8* 11.2* 14.6
OGDEN RIVER							
Beaver Crk-Skunk Crk. Ben Lomond Peak Ben Lomond(lower) Ben Lomond Trail Cutler Creek Dry Bread Pond Horse Ridge Monte Cristo R. S. Sagebrush Flat	11H14 11H8 11H9 11H30 11H29 11H13 11H21 11H12	7150 8000 5850 6000 6780 8230 8260 8960 6300	2/28 2/25 2/25 2/25 2/25 2/28 2/20 2/28 2/28	13 49 5 9 36 36 46 37 0	3.9 18.8 1.6 3.2 13.2 10.8 13.4 14.8 0.0	11.9 14.8 New Co New Co 16.6 26.6 3.6	



CURRENT

INFORMATION

PAST RECORD

SNOW

Silver Lake

2/27

11J16

8725

42

11.6



SNOW			CU	RRENT INFOR	RMATION	PAST	RECORD
DRAINAGE BASIN and SNOW	COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	AVERAGE a
UPPER SEVIER RIVER (South of Richfield, Utah	<u>)</u>						
Big Flat x Box Creek Bryce Canyon Castle Valley Cedar Breaks Duck Creek R. S. Fish Lake Harris Flat R. S. Kimberly Mine Long Valley Jnct. x Midway Valley Panguitch Lake Squaw Springs Widtsoe-Escalante Smt. Widtsoe-Escalante #2 Widtsoe-Escalante #3	12L7 12L4 12M8 12M13 12M1 12M4 11L3 12M5 12L6 12M6 12M2 12M7 12L5 11M1 11M2 11M3	10290 9800 8000 9700 10390 8560 8700 7700 8900 7500 9800 9300 9500 9500	2/21 2/25 2/26 2/26 2/26 2/26 2/26 2/26 2/26	34 22 0 15 22 1 Trace 0 20 0 23 Trace 7 6 14 20	8.4 4.9 0.0 4.0 5.0 0.2 0.0 6.4 0.0 5.2	14.8 10.8 5.4 15.7 23.0 19.6 5.4 12.3 11.2 6.1 26.1 3.3 6.4 9.5 10.6	15.8% 12.0% 12.0% 12.0% 13.5% 7.3% 9.0% 14.0% 5.9% 20.1% 4.5% 7.0% 6.7% 8.7%
LOWER SEVIER RIVER (Including San Pitch Rive	<u>r)</u>						
Bear Canyon Beaver Dams Farnsworth Lake G.B.R.C. Headquarters G.B.R.C. Meadows Gooseberry R. S. Gooseberry Reservoir x Mammoth R.SCtnwood Crk. Mt. Baldy R. S. Pine Creek Rees! Flat Shingle Mill	12L3 11K13 11L1 11K11 11K10 11L2 11K4 11K3 11K12 12L1 11K36 12L11	7200 8000 9900 8700 10000 8400 8700 8800 9500 8700 7300 6200	2/27 2/25 2/27 2/28 2/28 2/27 2/26 2/26 2/25 2/26 2/21 2/27	6 24 38 30 49 22 29 31 46 21 18	1.6 7.4 10.3 8.5 15.0 6.2 10.2 10.8 14.2 9.3 4.8 0.6	7.5 13.5 15.2 21.5 26.9 10.0 23.3 24.6 24.0 13.3 13.7	9.2* 10.1* 15.1* 13.6* 21.0* 9.3* 16.2* 17.1* 19.5* 13.3* 9.4*
BEAVER RIVER							
Big Flat Merchant's Valley Otter Lake	12L7 12L9 12L8	10000 8200 9300	2/21 2/21 2/21	34 8 29	8.4 1.7 6.9	14.8 9.8 13.2	15.8% 9.0% 13.6%
Ed Ward Flat Yankee Reservoir	12M12 12M11	8300 87 00	2/25 2/25	8 18	2.1 4.8	7.4 9.6	7.7* 9.8*

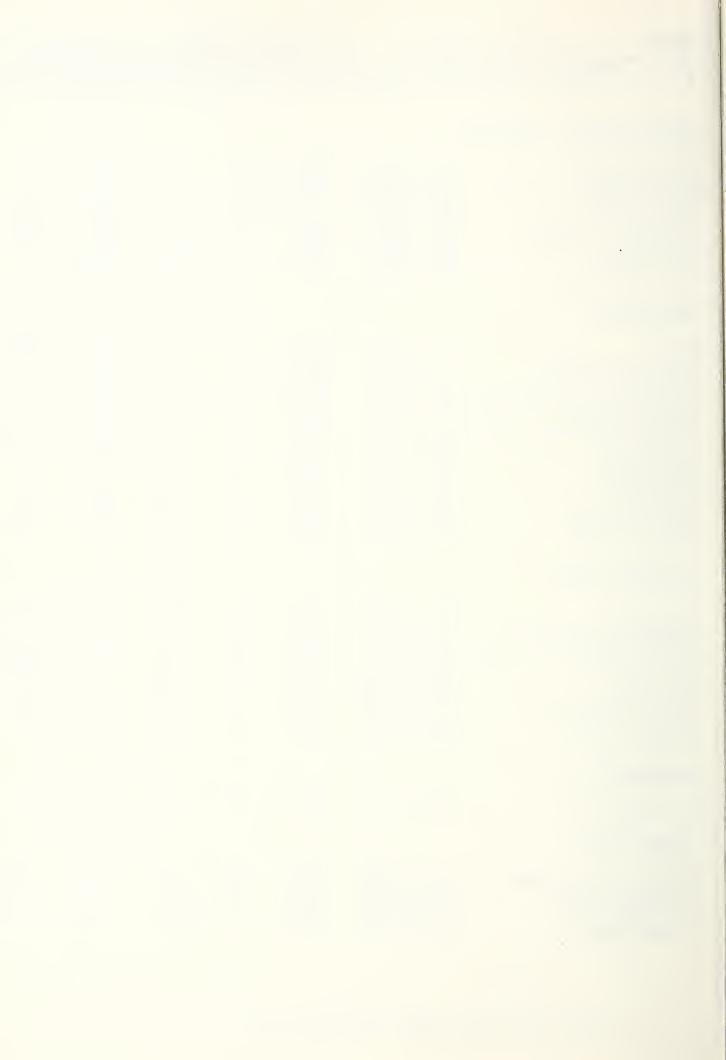


SNOW		1	CUI	RRENT INFORI	MATION	PAST F	RECORD
DRAINAGE BASIN and SNOW COURSE		DATE OF	SNOW DEPTH	WATER	<u> </u>	TENT (Inches)	
NAME	NO.	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	AVERAGE a
COAL CREEK					•		
Cedar Breaks Midway Valley x Urie Flat Webster Flat	12M1 12M2 12M10 12M3	10390 9800 8450 9200	2/26 2/26 2/26 2/26	22 23 0 9	5.0 5.2 0.0 2.2	23.0 26.1 10.9 21.0	19.2* 20.1* 7.8* 15.6*
ENTERPRISE TO NEW HARMONY DRAINAGES							
Little Grassy Creek Long Flat	13M4 13M2	6100 8000	3/1 2/27	0 4	0.0	3.6 6.4	5.7%
	COL	ORADO RI	VER DRA	INAGE			
UPPER GREEN RIVER IN UTAH (Tributaries above Flamin	g Gorge)					
Black's Fork Jct. Buck Pasture A East Fk.Black's Fk.G.S. Henry's Fork A Hewinta Guard Station Hickerson Park Spirit Lake Steel Creek Park	10J22 10J23 10J21 10J24 10J4 9J8 9J7 10J20	8925 9700 9300 10200 9500 9100 10300 9900	2/19 2/28 2/19 2/28 2/19 2/28 2/28 2/20	22 36 22 27 24 8 18 31	4.7 7.5A 5.3 5.9A 5.7 1.9 3.8 6.5	8.6 9.7 8.3 7.6 14.3	600. 600. 600. 600. 600. 600.
BRUSH CREEK							
Kings Cabin(lower) Kings Cabin(upper)	9J2 9J1	8600 87 3 0	2/27 2/27	9 14	1.8 3.1	11.4 12.6	8.7* 9. 9 *
DUCHESNE RIVER							
Ashley Twin Lakes A Atwood Basin A Chepeta-Whiterocks Lakes A Daniels-Strawberry Smt. x East Portal x Five Point Lake A Indian Canyon Julius Park Lakefork Basin Lakefork Mountain Lakefork Mountain #2 Lakefork Mountain #3		10500 10250 10300 8000 7560 11000 9100 9800 11100 10500 8900 8100	2/28 2/28 2/28 2/26 2/27 2/28 2/26 2/26 2/25 2/25 2/25	11 11 22 15 36 22 20 Report 18 15	2.4A 2.5A 2.3A 5.6 4.6 9.0A 5.9 5.0 4.4 4.0 3.2	20.5A 14.2A 18.0A 16.8 11.9 19.0A 15.4 17.0 N.R. 14.2 12.2	13.9 11.0* 10.7* 10.9* 7.6* 6.4*



SNOW		(CUR	RENT INFOR	MATION	DAST B	ECODD	
DRAINAGE BASIN and SNOW COURSE			DATE OF	SNOW DEPTH	WATER	PAST RECORD WATER CONTENT (Inches)		
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	AVERAGE a	
DUCHESNE RIVER - Continue	d							
Mosby Mountain Paradise Park Reynolds Park A Soapstone R.S. x Strawberry Divide x Trial Lake x Windy Park A	9J5 9J3 9J10 11J25 11J8 10J8 9J12	9500 10100 10400 7800 8000 9800 9400	2/26 2/26 No 2/28 2/27 2/28 2/28	19 16 Report 28 38 53	4.9 3.6 7.9 11.2 16.0 2.2A	13.9 15.3 New Ma 12.6 18.8 26.6 16.0A	10.2* 11.8* arker 12.0* 18.1* 23.4*	
PRICE RIVER								
Corral Dry Valley Divide Gooseberry Reservoir Grassy Trail Crk-Left Fk. Indian Canyon x Mammoth R.SCtnwood Crk. Mud Creek #2 Jones Ranch Timberline White River #1 White River #2 White River #3	10K5 11K8 11K4 10K3 10K1 x 11K3 11K3 11K7 10K6 10K2 11K24 11K25	8200 7800 8700 7970 9100 8800 8300 7600 9100 8600 7600 7400	2/28 2/26 2/26 2/28 2/26 2/26 2/26 2/26	5 8 29 11 22 31 20 0 18 20 10	1.5 3.4 10.2 1.7 5.9 10.8 5.6 0.0 3.7 5.0 3.0 0.3	14.1 14.6 23.3 14.6 15.4 24.6 16.5 11.3	8.0* 10.7* 16.2* 9.0* 10.7* 17.1* 11.5* 7.0* 12.2* 8.8* 8.9*	
SAN RAFAEL RIVER								
Buck Flat Gooseberry Reservoir Mammoth R.SCtnwood Crk.: Red Pine Ridge Rush Pond Seely Creek R.S. Upper Joe's Valley Wrigley Creek	11K31 11K4 x 11K3 11K28 11K38 11K9 11K29 11K32	8800 9400 9800 10000 8800	2/25 2/26 2/26 2/26 2/25 2/28 2/26 2/25	32 29 31 30 30 29 17	10.6 10.2 10.8 8.6 8.9 9.8 4.9 5.5	17.2 23.3 24.6 19.8 16.3 17.3 11.9	13.5* 16.2* 17.1* 15.3* 12.4* 13.0* 8.4* 9.1*	
MUDDY RIVER								
Mt. Baldy R.S. x	11K12	9500	2/25	46	14.2	24.0	19.5*	
FREMONT RIVER								
Black's Flat-UM Creek Farnsworth Lake x Fish Lake Johnson Valley	11L4 11L1 11L3 11L6	9900 8700	2/21 2/27 2/21 2/21	19 38 Tra	3.8 10.3 ce 1.4	9.2 15.2 5.4 5.6	9.0* 15.1* 7.3* 6.5*	

SNOW



CNOW								
SNOW	2µ0A			RRENT INFOR	MATION	PAST RECORD		
DRAINAGE BASIN and SNOW	COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONTENT (Inche		
NAME	NO.	ELEVATION	SURVEY	(Inches)	CONTENT (Inches)	LAST YEAR	AVERAGE a	
ESCALANTE RIVER Widtsoe-Escalante Smt. Widtsoe-Escalante #2	11M2	. 9500 9500	2/27 2/27	6	1.9	9.1 9.5	6.7 8.7*	
Widtsoe-Escalante #3 VIRGIN RIVER	11M3	9500	2/27	20	6.3	10.6	• •	
Cedar Breaks x Duck Creek R.S. Harris Flat R.S. Long Valley Jct. Midway Valley x Webster Flat	12M1 12M4 12M5 12M6 12M2 12M3	10390 8560 7700 7500 9800 9200	2/26 2/26 2/26 2/26 2/26 2/26	22 1 0 -0 23 9	5.0 0.2 0.0 0.0 5.2 2.2	23.0 19.6 12.3 6.1 26.1 21.0	19.2* 13.5* 9.0* 5.9* 20.1* 15.6*	
SOUTHEASTERN UTAH DRAINAG	ES							
Buckboard Flat Camp Jackson LaSal Mountain LaSal Mountain(upper)	9M1 9M2 9L1 9L2	9000 8600 8800 9600	2/20 2/20 2/21 2/21	21 21 27 40	5.4 5.4 6.2 9.7	12.4 11.0 9.6 14.0	13.3* 12.0* 9.8* 16.0*	



DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRE	NT INFORMAT	TION	FROM APPROX. IO/I TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVERAGE	THIS YEAR	1943 — 57 AVERAGE	PERCENT OF AVERAGE

GREAT	BASIN	DRAINAGE	
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	GREA	AT BASI	N DRAINAGI				
UPPER BEAR RIVER (Above Harer, Idaho)							
Chalk Creek #2 * Chalk Creek #3 * Monte Cristo #2 Salt River Summit Trial Lake *	8000 7500 8960 7900 9800	2/25 2/25 2/28 2/28 2/28	3.65 2.52 6.97 5.90 7.77	2.57 2.69 3.69	8.00 6.77 13.95 11.85 16.02	13.57 15.59 19.84	59 76 81
LOWER BEAR RIVER (Below Harer, Idaho)							
Dry Bread Pond Garden City Summit Klondike Narrows Little Bear(upper) Monte Cristo #2 Tony Grove R.S.(SCS) Willow Flat	8230 7600 7400 6850 8960 6250 6100	2/28 2/26 2/27 2/25 2/28 2/26 2/26	7.36 2.25 11.05 	3.06 3.40 3.50 	13.65 14.70 19.05 12.37 13.95 15.58 15.20	18.56 17.78 20.32	74 70 75
OGDEN RIVER							
Ben Lomond(lower) Ben Lomond Trail Causey Dam Dry Bread Pond Horse Ridge Monte Cristo #2 * Sagebrush Flat	5850 6000 5500 8230 8260 8960 6300	2/25 2/25 No 2/28 2/20 2/28 3/1	10.25 10.57 Report 7.36 6.97 0.97	3.81 3.06 1.98	16.66 17.00 13.65 14.25 13.95 9.61	22.02 18.56 12.13	76 74 79
WEBER RIVER							
Chalk treek #2 Chalk Creek #3 Farmington Guard Sta.(1) Farmington Rice(1) Horse Ridge Lost Creek Reservoir Parley's Canyon Smt. Silver Lake(Brighton)*(2) Smith & Morehouse Trial Lake *	8000 7500 7500 7000 8260 6125 7500 8725 7600 9800	2/25 2/25 2/28 2/27 2/20 2/20 2/27 2/28 2/27 2/28	3.65 2.52 3.40 2.61 1.96 4.88 3.64 1.15 7.77	2.57 3.80a 3.69a 2.68 4.39a 2.74 3.69	8.00 6.77 13.90 11.33 14.25 6.11 10.45 14.60 10.87 16.02	13.57 24.37a 22.21a 17.68 23.96a 14.74 19.84	59 57 51 59 61 74 81

⁽²⁾ Data supplied by U.S.Weather Bureau a all values estimated except those where symbol a occurs.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN		CURRE		TION	FROM AF	PPROX. IO/I T	DATE
AND RAIN GAGE LOCATION	ELEVATION	DATE OF READING	MONTH'S PRECIPITATION	1943 — 67 AVERAGE	THIS YEAR	1943 57 AVERAGE	PERCENT OF AVERAGE
PROVO RIVER & UTAH LAKE				а		a	
Clear Creek Ridge #2 Daniels-Strawberry Smt. Dutchman R. S. East Portal Ridge Hobble Creek Smt. Payson R. S. Soapstone R. S. Strawberry ResEast Porta Timpanogos Divide Trial Lake	8000 8000 7500 7800 7300 8050 7800 1 7606 8200 9800	2/25 2/26 2/27 2/27 2/26 2/26 2/28 2/27 2/27 2/28	0.60 1.02 8.55 3.27 0.85 4.80 5.60 7.77	2.23 2.50 	9.20 12.29 15.90 11.95 12.50 9.17 10.62 7.21 14.62 16.02	13.13 13.60 22.35 13.48 14.81 14.09 7.74 23.04a 19.84	70 90 71 93 62 75 93 63 81
JORDAN RIVER & TOOELE VALL	EY						
Middle Can, Mt. Dell Dam(2) Parley's Canyon Smt. Silver Lake(Brighton)(2)	7000 5500 7500 8725	2/26 2/28 2/27 2/28	1.28 1.68 4.88 3.64	1.93 1.82a 2.68 4.39a	7.41 6.86 10.45 14.60	13.43 10.97a 17.68 23.96 a	55 63 59 61
SEVIER RIVER ABOVE RICHFIE	LD						
Big Flat * Box Creek Castle Valley Cedar Breaks Duck Creek R.S. Panguitch Lake Webster Flat * Widtsoe-Escalante #3 Widtsoe R. S.	10290 9800 9700 10390 8560 8200 9200 9500 7600	2/21 2/25 2/28 2/26 2/26 2/28 2/26 2/27 2/27	5.60 	3.47 		13.47 11.43 10.39 15.20 7.41 15.60 9.89 4.14a	70 55 63 47 52 53 62 55
SEVIER RIVER BELOW RICHFIE (Including San Pitch River							
Beaver Dams Farnsworth Lake Fish Lake G.B.R.C. Headquarters(1) G.B.R.C. Meadows(1) G.B.R.C. Oaks(1) Gooseberry R. S. (1) Gooseberry Reservoir * Kimberly Mine Mammoth R. S. #2 * Mt. Baldy Pine Creek Shingle Mill	8000 9900 8700 8700 10000 7655 7800 8700 8900 8600 9500 8700 6200	2/25 2/27 2/21 2/28 2/28 2/28 2/27 2/26 2/26 2/26 2/25 2/26 2/27	1.79 3.43 6.15 2.62 1.25 1.45 1.30 1.30	3.85 0.65 2.79a 2.84a 1.89a 1.45 2.62	9.96	12.56 15.35 5.11 14.55a 15.14a 10.13a 9.55 14.22 14.70 14.15	63 72 75 68 94 72 83 78 49 76

⁽¹⁾ Data supplied by U.S.Forest Service Adjacent Drainage

⁽²⁾ Data supplied by U.S.Weather Bureau a All values estimated except those where symbol a occurs.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN	ELEVATION	DATE OF	NT INFORMA	TION 1943 — 57		PROX. 10/1 T	O DATE PERCENT OF	
AND RAIN GAGE LOCATION		READING	PRECIPITATION	AVERAGE	THIS YEAR	AVERAGE	AVERAGE	
BEAVER RIVER				a		ā		
Beaver Canyon P.H. (2) Big Flat	7275 10290	2/28 2/21	1.25 5.60	1.78a 3.47	3.47 9.37	8.26a 13.47	42 70	
PAROWAN CREEK								
Yankee Reservoir	8700	2/25		640 GBs.	4.75	8.70	55	
COAL CREEK								
Cedar Breaks Webster Flat *		2/26 2/26		4.40	7.90 8.24	15.60	53	
ENTERPRISE TO NEW HARMONY	DRAINAGE	S						
Little Grassy Creek Long Flat	6100 8000	3/1 2/27	ema, asso-	100. Min.		12.41 10.25	28 57	
	COLORA	DO RIVER	R DRAINA	GE				
UPPER GREEN RIVER IN UTAH (Tributaries above Flaming	Gorge)							
Black's Fork Jct. E.F. Black's Fk. G.S. Hewinta G. S. Spirit Lake	8925 9300 9500 10300	2/19 2/19 2/19 2/28	600- GBI 600- GBI 600- 400- GBO 600-		6.60 6.67 7.41 5.89	66, 65, 66, 65, 60, 65,	000, 000, 000, 000,	
BRUSH CREEK								
King's Cabin(upper)	8730	2/27	= =		5.50	10.16	54	
DUCHESNE RIVER								
Daniels-Strawberry Smt. * East Portal Ridge * Indian Canyon Julius Park Lakefork Mountain Moon Lake Paradise Park Soapstone R. S. * Strawberry ResE. Portal* Trial Lake *	8000 7800 9100 9800 10500 8150 10100 7800 7606 9800	2/26 2/27 2/26 2/26 2/25 2/28 2/26 2/28 2/27 2/28	2.65 0.20 0.85	2.60	4.70 7.19 10.62 7.21	enc enc	90 57 60 61 53 75 93 81	

⁽²⁾ Data supplied by U.S.Weather Bureau a All values estimated except those

where symbol a occurs



PRECIPITATION DATA (Inches)

DRAINAGE BASIN	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 T			
AND RAIN GAGE LOCATION	ELEVATION	DATE OF READING	MONTH'S PRECIPITATION	1943 — 57 AVE RAGE	THIS YEAR	1943 — 57 AVERAGE	PERCENT OF AVERAGE	
PRICE RIVER				a		a		
Clear Creek Ridge #2 * Gooseberry Reservoir Indian Canyon Mammoth R. S. #2 Mud Creek White River #1	8000 8700 9100 8600 8300 8600	2/25 2/26 2/26 2/26 2/26 2/27	0.60 1.45 0.10 1.30 1.05	2.23 2.62 - ~ 2.60 2.24	9.20 11.05 7.60 10.75 8.79 7.65	13.13 14.22 14.15 12.49 13.11	70 78 76 70 58	
SAN RAFAEL RIVER Buck Flat G.B.R.C. Meadows *(1) Gooseberry Reservoir * Red Pine Ridge Stuart R. S.	9400 10000 8700 9400 7950	2/25 2/28 2/26 2/26 2/27	1.00 6.15 1.45 5.87 3.75	2.30 2.84a 2.62 2.75	12.61 14.29 11.05 10.33 8.12	13.30 15.14a 14.22 14.10	95 94 78 73	
MUDDY RIVER Mt. Baldy R.S. *	9500	2/25	m. w		11.43	os es	ena OEC,	
FREMONT & ESCALANTE RIVERS Black's Flat-U.M. Creek Farnsworth Lake * Fish Lake Widtsoe-Escalante #3	9250 9900 8700 9500	2/21 2/27 2/21 2/27	1.79	3.85 0.65 1.66	5.60 11.08 3.85 6.10	7.80 15.35 5.11 9.89	72 72 75 62	
VIRGIN RIVER Duck Creek R.S. Webster Flat	8560 9200	2/26 2/26	1.15	4.45 4.40	7.20 8.24	15.20 15.60	47 53	
SOUTHEASTERN UTAH DRAINAGE Buckboard Flat Camp Jackson	9000 8600	2/20 2/20	500, dd	GIG	9.00 - 7.55	13.32 10.92	68 69	

⁽¹⁾ Data supplied by U.S.Forest Service (2) Data supplied by U.S.Weather Bureau * Adjacent Drainage a All values estimated except those

where symbol a occurs



Agencies Cooperating in Utah Snow Surveys

U.S. GOVERNMENT AGENCIES

- U.S. Department of Agriculture Soil Conservation Service Forest Service
- U.S. Department of Commerce Weather Bureau
- U.S. Department of Interior
 Bureau of Reclamation
 Geological Survey
 National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Little Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioner
Spanish Fork River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

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